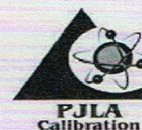


# CERTIFICATION OF CALIBRATION

ISSUED BY: QED Environmental Systems, Inc. Services Facility

Date Of Calibration: February 20, 2017

Certificate Number: G501626\_8/31539



No. 66916

Page 1 of 2

Approved By Signatory



QED Environmental Systems, Inc. Services Facility,  
2355 Bishop Circle West, Dexter, MI 48130  
www.qedenv.com

Jake Aughton  
Laboratory Inspection

**Customer:** QED

2355 Bishop Circle West  
Dexter, MI 48130  
USA

**Description:** Gas Analyser

**Model:** GEM5000

**Serial Number:** G501626

## Accredited Results:

Methane (CH <sub>4</sub> )		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	5.0	0.42
15.0	15.0	0.66
50.0	49.8	1.03

Carbon Dioxide (CO <sub>2</sub> )		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.9	0.43
15.0	14.9	0.71
50.0	49.7	1.19

Oxygen (O <sub>2</sub> )		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
20.7	20.8	0.25

Gas cylinders are traceable and details can be provided if requested.

CH<sub>4</sub>, CO<sub>2</sub> readings recorded at: 34.5 °C/94.1 °F

Barometric Pressure: 29.17 "Hg

O<sub>2</sub> readings recorded at: 25.1 °C/77.2 °F

Method of Test: The analyzer is calibrated in a temperature controlled chamber using reference gases. All analyzers are calibrated in accordance with our procedure ISP-17 using high purity grade gas.

All calibrations are performed in accordance with ISO 17025 at LANDTEC, an ISO 17025:2005 – accredited service facility through PJLA.

*The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with NIST requirements.*

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable through NIST to the International System of Units (SI). Certification only applies to results shown. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

LP015LNANIST-1.1

QED Instrument Services Facility - 2355 Bishop Circle West, Dexter, MI. 48130

WM02524



# CERTIFICATION OF CALIBRATION

PJLA ACCREDITED CALIBRATION LABORATORY NO. 66916

Certificate Number

G501626\_8/31539

Page 2 of 2

## Non Accredited results:

Pressure Transducers (inches of water column)					
Transducer	Certified (Low)	Reading (Low)	Certified (High)	Reading (High)	Accuracy
Static	0"	0.00"	40"	40.21"	2.0"
Differential	0"	0.00"	4"	4.06"	0.7"

Barometer (mbar)	
Reference	Instrument Reading
0988 mbar / 29.17 "Hg	0989 mbar / 29.21 "Hg

As received gas check readings are only recorded if the instrument is received in a working condition.  
Where the instrument is received damaged no reading can be taken.

End of Certificate

LP015LNANIST-1.1

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WM02525